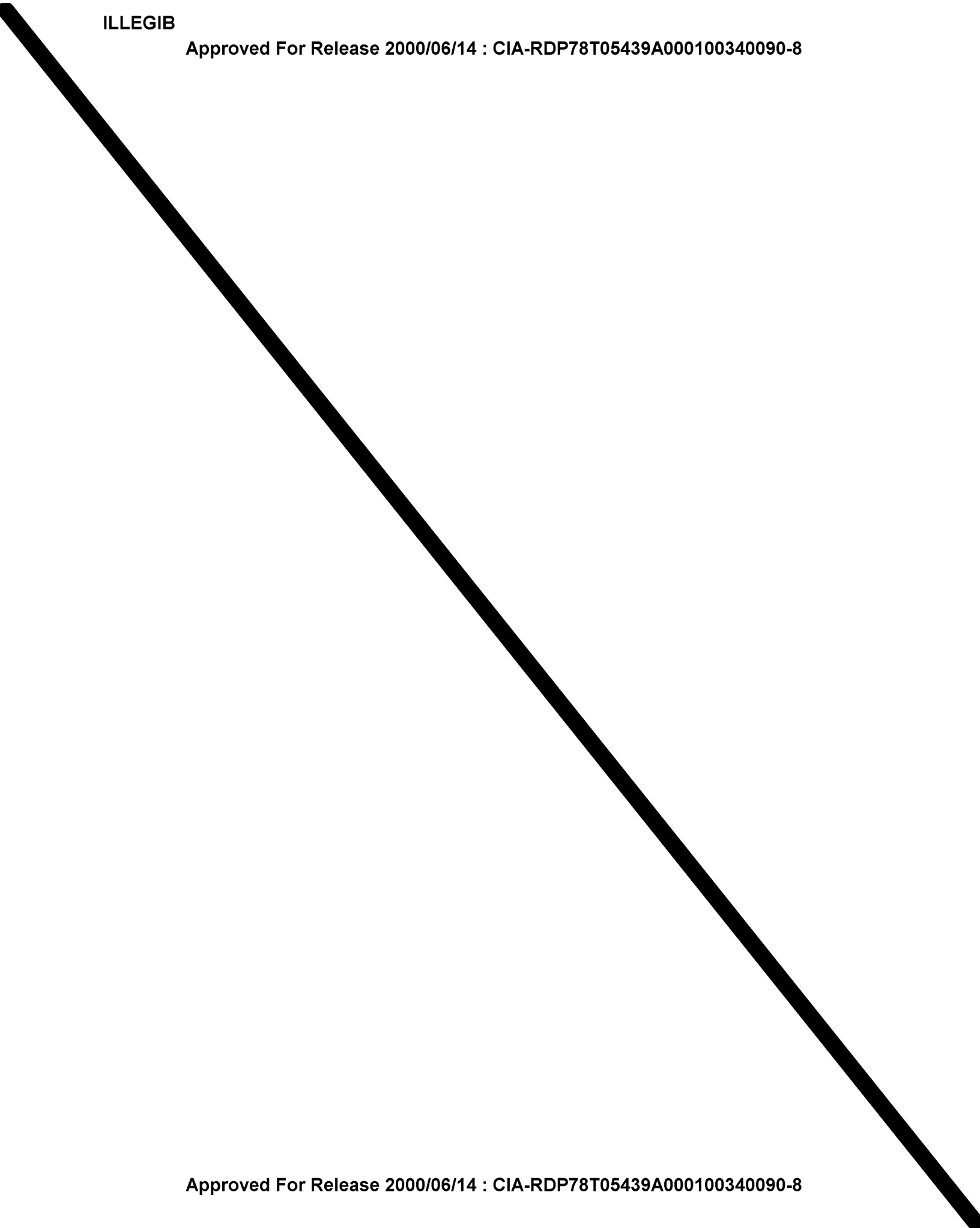

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(DOWNGRADING PROHIBITED)

JOINT PHOTOGRAPHIC INTELLIGENCE REPORT

LAUNCH COMPLEX "E"
SURFACE-TO-SURFACE MISSILE FACILITIES
KAPUSTIN YAR/VLADIMIROVKA
MISSILE TEST CENTER, USSR

PIC/JR-1005/61
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PREFACE

This joint photographic intelligence report has been prepared by the Army, Navy, and Central Intelligence Agency as a partial answer to a general requirement for a detailed analysis of the Kapustin Yar/Vladimirovka Missile Test Center. The purpose of this report is to present a detailed photo analysis of Launch Complex "E", one of several comprising the Surface-to-Surface Missile Facilities. Analysis is also under way on other Test Center facilities, including the Surface-to-Air Missile Facilities and the Probable Aerodynamic Missile Facilities. Each of these remaining complexes or facilities will also be the subject of a subsequent report.

Insofar as possible, this report includes a comparison of [redacted] 25X1D
[redacted] and the line drawings portray in green all changes and additions subsequent to the [redacted]. All 25X1D
25X1D reported azimuths are referenced from true north, and the term miles refers to nautical miles.

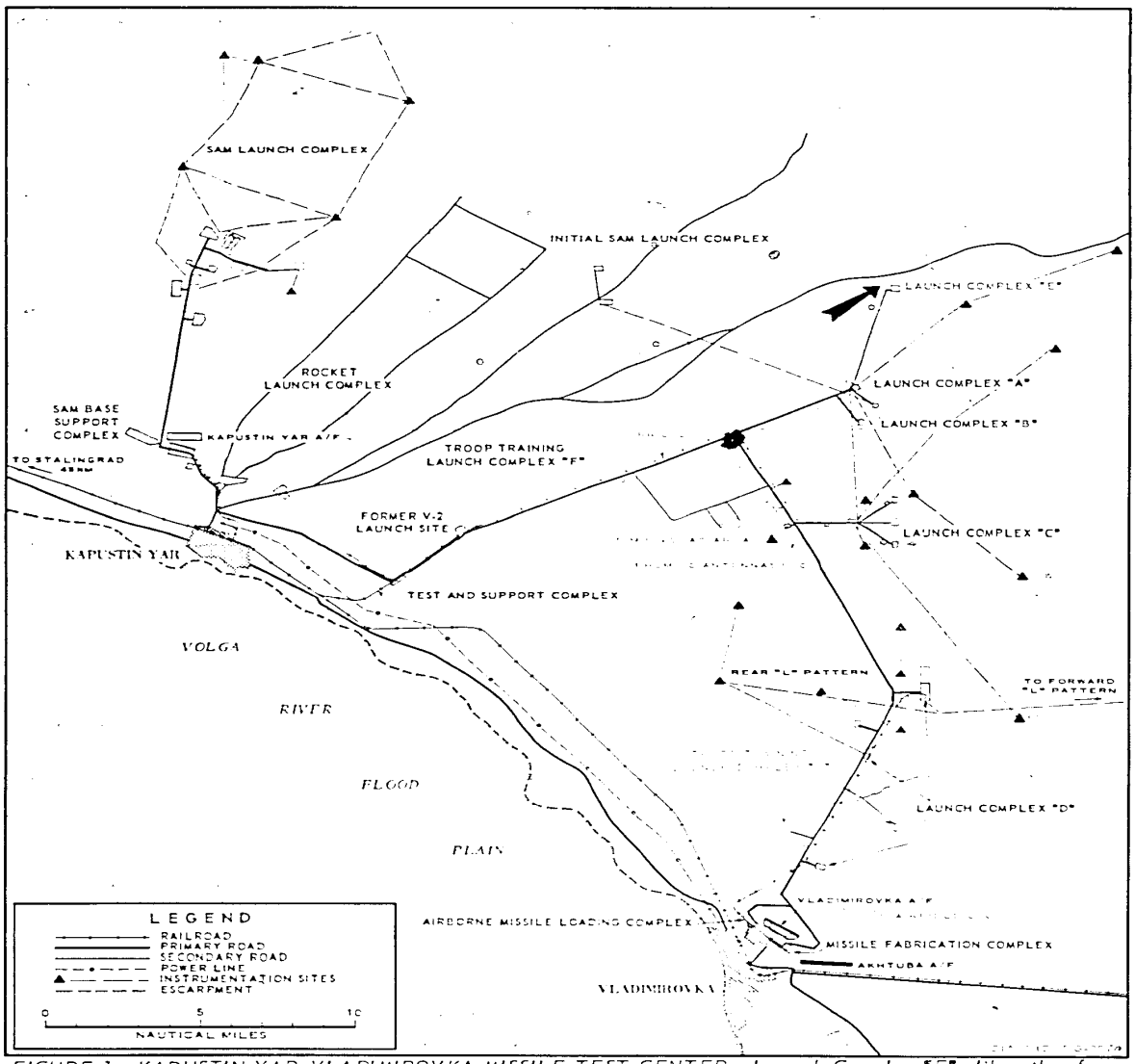

FIGURE 1. KAPUSTIN YAR VLADIMIROVKA MISSILE TEST CENTER. Launch Complex "E", like other facilities shown in green, was added [redacted]

INTRODUCTION

The Surface-to-Surface Missile Facilities constitute the largest, most varied, and most widely dispersed group in the Center. They include the following: Launch Complexes "A," "B," "C," and "E"; Troop Training Launch Complexes "F" and "G"; the Rocket Launch Complex; and the Test and Support Complex (Figure 1). All these complexes are supported from Kapustin Yar, except Troop Training Launch Complex "G," which is supported from Vladimirovka. The former V-2 Launch Site, now abandoned, is also located in the area of the SSM facilities.

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Launch Complex "E", under construction in [redacted] is the most recent of the SSM launch complexes. Its presence is indicative of a new missile system under development. The area of Complex "E" was

25X1D

25X1D covered [redacted] the Complex was in a late stage of construction; there was no evidence on the [redacted] suggesting its eventual establishment. It is estimated that the Complex should have become operational by mid 1960.

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Launch Complex "E" is road served and consists of a double-fenced launch area (Launch Area "E") and a single-fenced Assembly and Checkout Area (Figure 2). Launch Area "E" is situated at 48-46N 46-18E, 28 miles by road from Kapustin Yar. The Assembly and Checkout Area is located four miles to the south of the launch area, adjacent to the support area of Launch Complex "A".

25X1D [redacted]

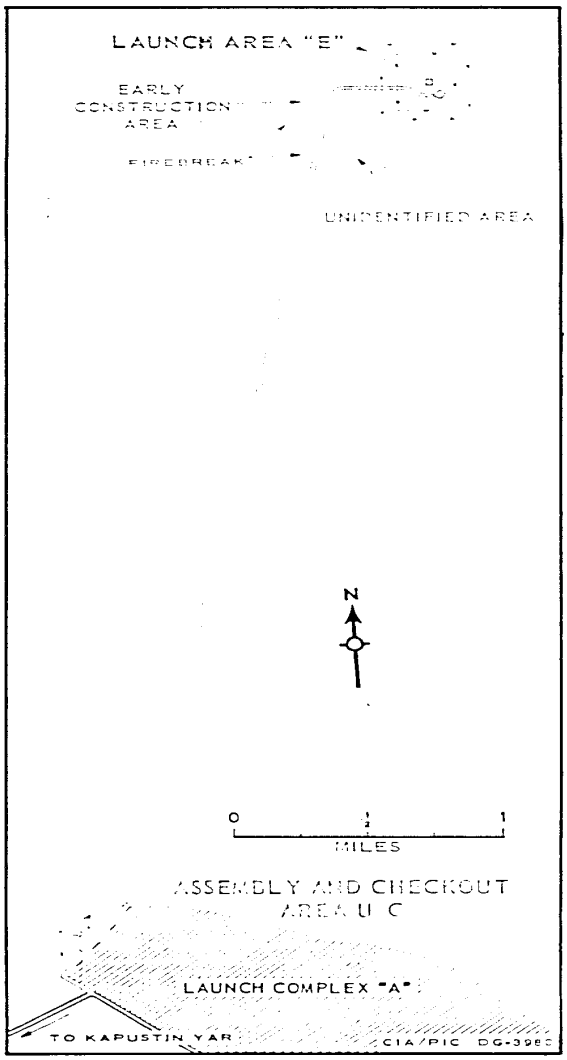

FIGURE 2. LAUNCH COMPLEX "E". This illustration shows the location and association of areas comprising this Complex.

25X1D [redacted] photo coverage, no water, power, or communications lines appeared to connect the assembly and checkout area with the launch area.

Two inactive areas of minor importance, an Early Construction Area and an Unidentified Area, are located to the west of and along the road to the launch area. The Early Construction Area, delineated by a firebreak, covers about 20 acres. It contains seven single-story buildings of various sizes and a group of 38 tent bases. The area appears abandoned and apparently was active only during the early construction phase of the launch area. The Unidentified Area, also delineated by a firebreak and covering about 35 acres, was probably in existence prior to the construction of the road to the launch area, since the road is superimposed over the extreme western end of the surrounding firebreak. There are no structures or buildings in the area, and there is no evidence that it will be used in the future.

LAUNCH AREA "E"

Launch Area "E" (Figures 3

and 4), situated at the terminus of a new all-weather road from Launch Complex "A", is a nearly square double-fenced area 1,840 by 1,680 feet covering about 70 acres. Security consists of two perimeter fences, 160 feet apart, with guard towers at each corner, and a security building. Between the fences is a ditch with short offshoots to each guard tower. Significant items in the launch area include a launch pad, a control bunker, a vehicle revetment, a vehicle bunker, and two semiburied tanks. A concrete service road 25 feet wide enters the area from the west, tees near the control bunker, and provides access to the large square launch pad. Other items within the area include three circular ground scars and eight single-story general support and maintenance buildings. Sufficient room is available in the northern half of the launch area for the construction of another large launch pad. However, at the time of photography there was no evidence that a second pad was being constructed. The location and orientation of the predicted pad is shown in form lines on Figure 4.

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of all launch area items follows:

Item 1 - Launch pad: The launch pad measures 230 feet on a side and is of concrete construction. It is the largest square pad found at the SSM launch complexes. A concrete loop road, 25 feet wide, provides access to the pad on the southeast side and at the west corner. Drainage ditches are present in the vicinity of the pad, and both the launch pad and service road have been graded above the general level of the land to insure proper drainage. On the pad and in line with the road on the southeast side are six vertical poles 20 feet high in two rows of three each. These poles, which have possible cross members on top, form an aisle 50 feet long and 15 feet wide. They may be part of a missile handling structure, supports for a canvas covering, or some other facility in an early stage of construction. A concrete apron extends off the north end of the pad and serves the vehicle revetment and bunker (items 3 and 4). Four 70-foot-

FIGURE 3. LAUNCH AREA "E" AND TWO ADJACENT INACTIVE AREAS. [redacted]

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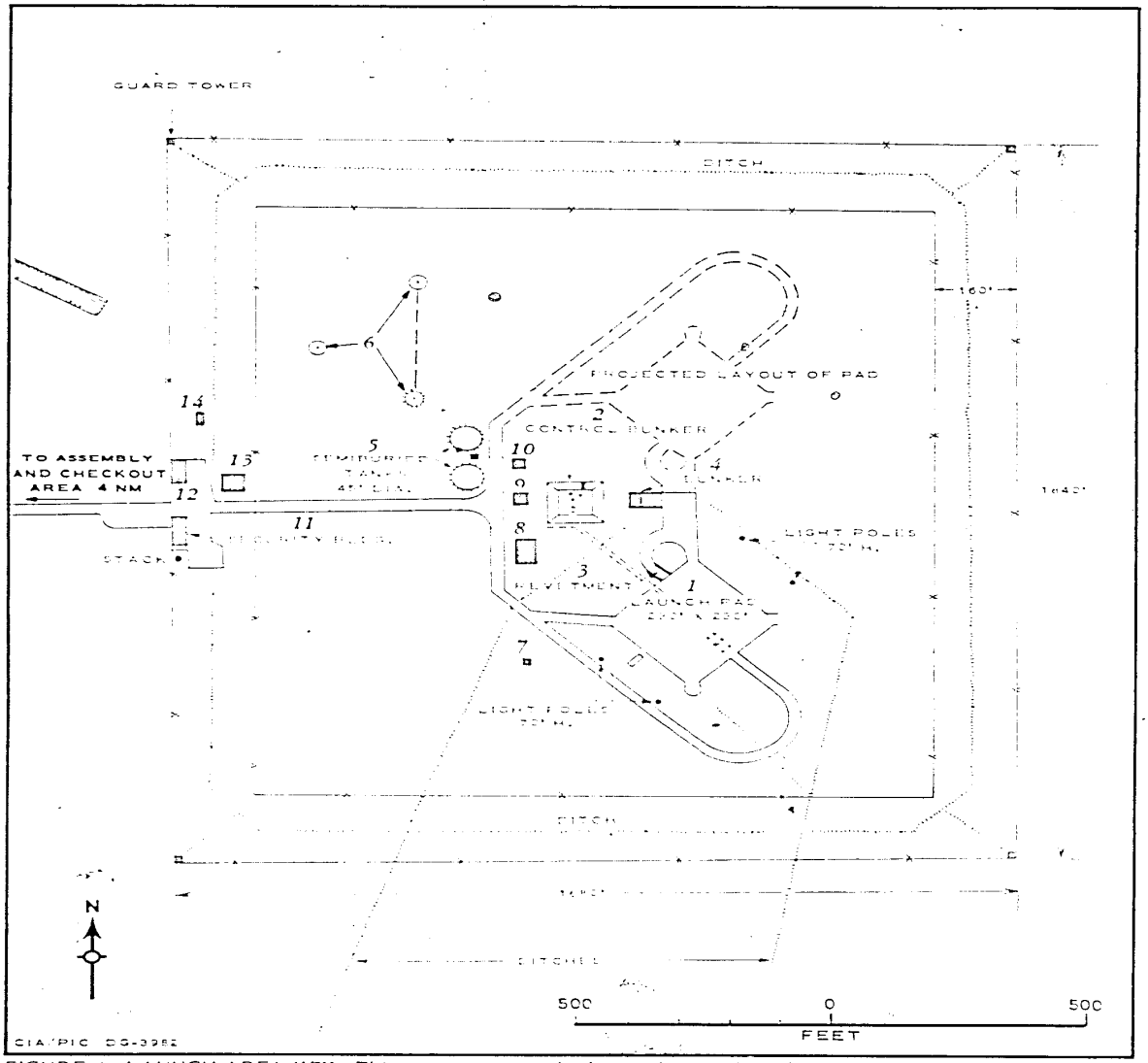

FIGURE 4. LAUNCH AREA "E". This area contains the largest square launch pad in the SSM launch complexes.

high light standards are located on the northeast and southwest sides of the pad. Lines constructed between diagonally opposite poles pass through the center of the pad.

Item 2 - Control bunker: The control bunker, located in the center of the launch area, 375 feet from the center of the launch pad, is an earth-mounded structure measuring 125 feet square at the base, 70 feet square at the top, and about 10 to 15 feet high. Possibly five objects are on top of the bunker. Two probable cable trenches lead from near the bunker to the pad. Access is gained through a personnel entrance in the north side of the bunker. If a second pad were to be constructed, this bunker would probably serve both.

Item 3 - Vehicle revetment: This revetment, which abuts the northwest side of the pad, is 50 feet long and 25 feet wide. It may serve as an entrance beneath the pad or as protection for launch support equipment. At least three other launch areas in the SSM facilities have a similarly positioned revetment. The road leading to this revetment, the concrete apron, and the northwestern edge of the launch pad delineate a dark, slightly depressed, circular area, 70 feet in diameter. No particular significance or function can be attached to this area.

Item 4 - Vehicle bunker: This bunker consists of a covered section 40 by 20 feet divided into two bays, served by a ramp measuring 50 by 40 feet. It probably serves as protection for launch support equipment. Again, if a second pad were constructed, this bunker might be used jointly.

Item 5 - Two semiburied tanks: Two tanks, 45 feet in diameter and 40 feet apart, are located along a branch of the T-shaped service road. A valve or pump house is situated between the tanks. No pipeline traces can be observed either entering or leaving these tanks.

Item 6 - Three circular ground scars: These scars, one of which has the appearance of being a buried tank, are about 25 feet in diameter. They are located in the northwestern section of the launch area and positioned

so as to form a triangle with two sides measuring about 220 feet and one side 290 feet. An unidentified object is near the center of each scar. A linear scar connects two of these circular scars.

Items 7 through 10 - Buildings: These structures are located in a north-south line near the center of the launch area. The largest is a gable-roofed structure (Item 8) measuring 55 by 35 feet. It is probably intended for use by launch personnel but not for active support of firing operations. No functions can be determined for the other three buildings: item 7, 20 by 20 feet, gable roofed; item 9, 30 by 25 feet, flat roofed; and item 10, 25 by 20 feet, flat roofed.

Items 11 through 14 - Buildings: These structures, located between the two security fences near the entrance to the launch area, are concerned with the security and maintenance of the launch area. The security building (item 11) measures 75 by 30 feet and probably has accommodations for the patrolling troops. A 65-foot-high stack, detached from the building, is located near the south end. The other three buildings are: item 12, 60 by 30 feet, flat roofed; item 13, 45 by 45 feet, hip roofed; and item 14, 25 by 20 feet, gable roofed. Parking hardstands are associated with two buildings (items 11 and 12).

ASSEMBLY AND CHECKOUT AREA

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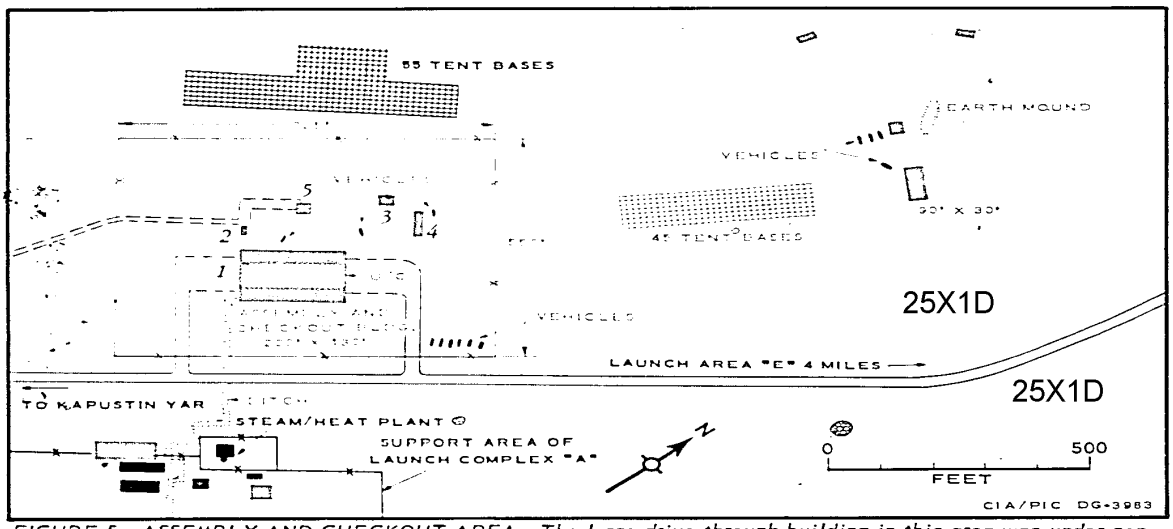
The Assembly and Checkout Area, in mid stage of construction in [redacted] is road served and located just north of the support area of Launch Complex "A" (Figure 5). Its association with Launch Complex "E" is based on its location along the new road to the launch area and the convenient flow pattern evident at the drive-through building. However, since Launch Complex "A" is undergoing modification and expansion, the possibility that this area may have a functional relationship with Complex "A" cannot be overlooked. In either case this area will receive its utility support from Complex "A".



25X1D *FIGURE 5. ASSEMBLY AND CHECKOUT AREA. The large drive-through building in this area was under construction in* [redacted]

The area, which encompasses about nine acres, is enclosed by a fence measuring 725 by 550 feet. Guard towers and a security building were not present at the time of photography. Within the area there is an assembly and checkout building and several miscellaneous structures. Outside the security fence is a group of 55 tent bases present in [redacted], a group of 45 tent bases new since [redacted], and four randomly positioned buildings, the largest of which is gable roofed and measures 90 by 30 feet. Four vehicles are located near 2 of the latter buildings, and about 9 vehicles are located inside the fenced area. A detailed description of items within the fenced area follows.

Item 1 - Assembly and checkout building: This drive-through building, which measures 200 feet long by 130 feet wide, has a total floor space of 26,000 square feet. It consists of a 70-foot-wide, 200-foot-long-clerestory center section flanked by two 30-foot-wide, 25-foot-high workshops. The workshops are roofed; the center section has only the end supports

in position. Two rows of windows are visible on one side of one workshop. The entrance to the clerestory center section will be about 45 feet wide. A parking hardstand is being constructed at both ends of the building. An open ditch, probably for a steam line leads from the southern corner of the building, across the road, and past the steam/heat plant in the support area of Launch Complex "A". A building under construction at a new rail-served assembly and checkout area at Launch Complex "C" is similar in plan view and dimensions.

Items 2 through 4 - Buildings: No particular function other than general support can be ascribed to these three single-story structures, which measure 30 by 20 feet, 40 by 20 feet, and 60 by 15 feet, respectively.

Item 5 - Sump or pit: This is an excavation 30 feet square which has two parallel earth scars leading from it.

CONCLUSIONS

Launch Complex "E" is a road-served ballistic missile launch facility to be used in the research and development of a new missile system. It should have become operational by mid-1960. Although one launch pad is present, it is expected that a second pad will eventually be constructed. Since no instrumentation facilities can be associated with the complex, it is assumed either that they are yet to be constructed or that the missile will use existing test range instrumentation. Since both the launch pad and the assembly and checkout building are large when compared with those at the other SSM launch complexes, it is possible that the missile to be fired from Launch Complex "E" is as large as or larger than those fired from the other SSM launch complexes.

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